

Title (en)  
Method for fast acquisition of traffic channels for a highly variable data rate

Title (de)  
Verfahren zur schnellen Nutzkanalerfassung für eine stark wechselnde Datenrate

Title (fr)  
Procédé d'acquisition rapide de voies de trafic destinée à un débit de données très variable

Publication  
**EP 1631113 A3 20071128 (EN)**

Application  
**EP 05077427 A 19990526**

Priority  
• EP 99937144 A 19990526  
• US 8841398 A 19980601

Abstract (en)  
[origin: WO9963682A2] A service option overlay for a CDMA wireless communication in which multiple allocatable subchannels are defined on a reverse link by assigning different code phases of a given long pseudonoise (PN) code to each subchannel. The instantaneous bandwidth needs of each on-line subscriber unit are then met by dynamically allocating none, one, or multiple subchannels on an as needed basis for each network layer connection. The system efficiently provides a relatively large number of virtual physical connections between the subscriber units and the base stations on the reverse link for extended idle periods such as when computers connected to the subscriber units are powered on, but not presently actively sending or receiving data. These maintenance subchannels permit the base station and the subscriber units to remain in phase and time synchronism. This in turn allows fast acquisition of additional subchannels as needed by allocating new code phase subchannels. Preferably, the code phases of the new channels are assigned according to a predetermined code phase relationship with respect to the code phase of the corresponding maintenance subchannel.

IPC 8 full level  
**H04J 13/18** (2011.01); **H04B 1/7075** (2011.01); **H04B 7/212** (2006.01); **H04B 7/216** (2006.01); **H04B 7/26** (2006.01); **H04J 3/06** (2006.01); **H04J 11/00** (2006.01); **H04J 13/00** (2011.01); **H04J 13/16** (2011.01); **H04L 1/00** (2006.01); **H04L 1/16** (2006.01); **H04L 1/18** (2006.01); **H04L 7/06** (2006.01); **H04L 12/28** (2006.01); **H04L 12/56** (2006.01); **H04L 25/14** (2006.01); **H04Q 11/04** (2006.01); **H04W 28/20** (2009.01); **H04W 28/22** (2009.01); **H04W 56/00** (2009.01); **H04W 72/04** (2009.01); **H04B 1/707** (2011.01); **H04L 27/26** (2006.01); **H04W 52/02** (2009.01); **H04W 74/00** (2009.01); **H04W 74/04** (2009.01); **H04W 84/14** (2009.01)

CPC (source: EP KR US)  
**H04B 1/7075** (2013.01 - EP US); **H04B 1/70754** (2013.01 - EP US); **H04B 7/2628** (2013.01 - EP US); **H04J 13/0022** (2013.01 - EP US); **H04J 13/16** (2013.01 - EP US); **H04J 13/18** (2013.01 - EP US); **H04L 1/0007** (2013.01 - EP US); **H04L 1/165** (2013.01 - EP US); **H04L 1/1809** (2013.01 - EP US); **H04L 7/0008** (2013.01 - KR); **H04L 7/06** (2013.01 - EP US); **H04L 25/14** (2013.01 - EP US); **H04L 27/2601** (2013.01 - KR); **H04Q 11/0428** (2013.01 - EP US); **H04W 28/20** (2013.01 - EP KR US); **H04W 28/22** (2013.01 - EP KR US); **H04W 56/0045** (2013.01 - EP KR US); **H04W 56/0075** (2013.01 - EP KR US); **H04W 72/044** (2013.01 - EP KR US); **H04W 72/0446** (2013.01 - EP KR US); **H04W 72/0453** (2013.01 - EP KR US); **H04W 72/0466** (2013.01 - KR); **H04W 72/21** (2023.01 - KR); **H04B 2001/70706** (2013.01 - EP US); **H04B 2201/70703** (2013.01 - EP US); **H04B 2201/70709** (2013.01 - EP US); **H04B 2201/70715** (2013.01 - EP US); **H04J 13/004** (2013.01 - EP US); **H04L 27/2601** (2013.01 - EP US); **H04Q 2213/13098** (2013.01 - EP US); **H04Q 2213/13202** (2013.01 - EP US); **H04Q 2213/13204** (2013.01 - EP US); **H04Q 2213/13209** (2013.01 - EP US); **H04Q 2213/13216** (2013.01 - EP US); **H04Q 2213/1327** (2013.01 - EP US); **H04Q 2213/13298** (2013.01 - EP US); **H04Q 2213/13332** (2013.01 - EP US); **H04Q 2213/1336** (2013.01 - EP US); **H04Q 2213/13389** (2013.01 - EP US); **H04W 24/00** (2013.01 - EP US); **H04W 56/00** (2013.01 - EP US); **H04W 72/0466** (2013.01 - EP US); **H04W 72/21** (2023.01 - EP US); **H04W 74/00** (2013.01 - EP US); **H04W 74/04** (2013.01 - EP US); **H04W 76/28** (2018.01 - EP US); **H04W 84/14** (2013.01 - EP US)

Citation (search report)  
• [X] US 5442625 A 19950815 - GITLIN RICHARD DENNIS [US], et al  
• [A] US 5414728 A 19950509 - ZEHAVI EPHRAIM [US]  
• [A] WO 9726726 A1 19970724 - MOTOROLA INC [US]  
• [A] EP 0720309 A2 19960703 - AT & T CORP [US]

Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB GR IE IT LI NL SE

DOCDB simple family (publication)  
**WO 9963682 A2 19991209**; **WO 9963682 A3 20000127**; AT E313924 T1 20060115; AU 5203099 A 19991220; AU 750879 B2 20020801; CA 2333654 A1 19991209; CA 2333654 C 20081118; CA 2636713 A1 19991209; CA 2636713 C 20140318; CA 2834031 A1 19991209; CA 2834031 C 20151117; CN 1257654 C 20060524; CN 1304625 A 20010718; CN 1882184 A 20061220; DE 69929050 D1 20060126; DE 69929050 T2 20060803; DK 1084587 T3 20060522; EP 1084587 A2 20010321; EP 1084587 B1 20051221; EP 1631113 A2 20060301; EP 1631113 A3 20071128; EP 1631113 B1 20120815; EP 2262177 A1 20101215; EP 2262177 B1 20120822; ES 2253902 T3 20060601; HK 1034402 A1 20011019; JP 2002517941 A 20020618; JP 2008079327 A 20080403; JP 2009268140 A 20091112; JP 2010259083 A 20101111; JP 2010283848 A 20101216; JP 2012019528 A 20120126; JP 2012213217 A 20121101; JP 2013081254 A 20130502; JP 4603159 B2 20101222; JP 4887444 B2 20120229; JP 5236692 B2 20130717; JP 5242511 B2 20130724; JP 5524147 B2 20140618; JP 5524281 B2 20140618; JP 5639201 B2 20141210; KR 100795769 B1 20080121; KR 100826859 B1 20080506; KR 100877391 B1 20090107; KR 100885989 B1 20090303; KR 100902621 B1 20090611; KR 101119751 B1 20120412; KR 101171621 B1 20120806; KR 101226456 B1 20130128; KR 101298815 B1 20130822; KR 101298847 B1 20130823; KR 20010071367 A 20010728; KR 20070001287 A 20070103; KR 20070046979 A 20070503; KR 20070057279 A 20070604; KR 20070102759 A 20071019; KR 20080025214 A 20080319; KR 20090006214 A 20090114; KR 20090132642 A 20091230; KR 20110023908 A 20110308; KR 20110058913 A 20110601; KR 20110107855 A 20111004; KR 20120034245 A 20120410; KR 20120098897 A 20120905; NO 20006076 D0 20001130; NO 20006076 L 20010130; NO 20070706 L 20010130; NO 20083653 L 20010130; NO 323653 B1 20070618; NO 326627 B1 20090119; NO 336327 B1 20150803; US 2001002904 A1 20010607; US 2002054581 A1 20020509; US 2002163898 A1 20021107; US 2004208147 A1 20041021; US 2004213176 A1 20041028; US 2005249168 A1 20051110; US 2005259624 A1 20051124; US 2010208708 A1 20100819; US 2013201962 A1 20130808; US 6222832 B1 20010424; US 6452913 B1 20020917; US 6678260 B2 20040113; US 6707804 B2 20040316; US 6928064 B2 20050809; US 6940842 B2 20050906; US 7480280 B2 20090120; US 7602749 B2 20091013; US 7746830 B2 20100629; US 8139546 B2 20120320; US 8792458 B2 20140729

DOCDB simple family (application)

**US 9911607 W 19990526**; AT 99937144 T 19990526; AU 5203099 A 19990526; CA 2333654 A 19990526; CA 2636713 A 19990526;  
CA 2834031 A 19990526; CN 200610084753 A 19990526; CN 99806939 A 19990526; DE 69929050 T 19990526; DK 99937144 T 19990526;  
EP 05077427 A 19990526; EP 10182136 A 19990526; EP 99937144 A 19990526; ES 99937144 T 19990526; HK 01104656 A 20010706;  
JP 2000552788 A 19990526; JP 2007264917 A 20071010; JP 2009157910 A 20090702; JP 2010132801 A 20100610;  
JP 2010158165 A 20100712; JP 2011177740 A 20110815; JP 2012141289 A 20120622; JP 2013002916 A 20130110;  
KR 20007013589 A 20001201; KR 20067025503 A 20061204; KR 20077008223 A 20070411; KR 20077010771 A 20070511;  
KR 20077022128 A 20070927; KR 20087005207 A 20080229; KR 20087028713 A 20081124; KR 20097023757 A 19990526;  
KR 20117002201 A 19990526; KR 20117010308 A 19990526; KR 20117019070 A 19990526; KR 20127004787 A 19990526;  
KR 20127018956 A 19990526; NO 20006076 A 20001130; NO 20070706 A 20070207; NO 20083653 A 20080825; US 17912102 A 20020624;  
US 18352005 A 20050718; US 18367705 A 20050718; US 201213423859 A 20120319; US 51548700 A 20000229; US 73037600 A 20001205;  
US 75587404 A 20040112; US 76113004 A 20040120; US 76844510 A 20100427; US 8841398 A 19980601; US 99762101 A 20011129